#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-000418 Address: 333 Burma Road **Date Inspected:** 27-Aug-2007

City: Oakland, CA 94607

**OSM Arrival Time:** 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Xa Le Feng **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes N/A No

34-0006 **Bridge No: Component:** MOCK UP

### **Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding being performed for the fabrication of the Mock Up at elevation 77. On going work included the layout and fit up of the longitudinal stiffeners piece marks MP1, MP2-1, MP2-2 and MP2-3 on to diaphragm piece mark MA2. Other work observed included the attachment of the rotating devices to skin panel A and heat straightening on skin plate MP11-1/MA3-1. The QA Inspector observed ZPMC CWI Xa Le Feng monitoring preheat, welding amperage and welding voltage. The QA Inspector also performed random verification of the above weld parameters and documented same. The welding amperage was 172 amps with a corresponding welding voltage of 23 volts using the shielded metal arc welding process. The work monitored for weld parameters was the attachment of the rotating device to skin plate A by ZPMC welder Zhang Xian Grong using approved ZPMC weld procedure specification WPS-B-P-2112. Weld parameters appeared to be in compliance. The following photograph provides additional detail of the layout for and the fit up of the longitudinal stiffeners.

# WELDING INSPECTION REPORT

(Continued Page 2 of 2)





## **Summary of Conversations:**

ZPMC QA Representative Shen Xue Jun informed the QA Inspector that at approximately 1500 this afternoon, ZPMC will be performing magnetic particle inspection of the weld splice between skin plates piece marks MA-1 and MP-15. The QA Inspector informed Mr. Jun that he would turnover the information to QA Inspector Mike Hasler who was coming in on the second shift.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Franco, Charlie	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer